

College of Engineering Graduate Programs
Mechanical Engineering

Program Study Plan

Student Name: _____ ID: _____

Starting semester: _____

A. Tentative list of courses to be taken (check selected course). **Thesis option** needs 7 courses and **project option** needs 9 courses.

In addition, all students must complete a seminar course (MCE 695).

College Core Courses: (3 credits)

Students must successfully complete **one** of the following courses:

- 1- NGN 500 Advanced Engineering Mathematics
- 2- NGN 505 Random Variables and Stochastic

Elective Courses	
<ul style="list-style-type: none"> • Students in the thesis option must successfully complete a minimum of 18 credits. • Students in the project option must successfully complete a minimum of 24 credits. 	
Students can select elective courses from the following list:	
Course Description	Pre-requisite
MCE 550 (3cr) - Mechanical Systems Design	
MCE 552(3cr) - Modeling and Simulation of Mechanical Systems	
MCE 553 (3cr) - Advanced Thermodynamics	
MCE 554 (3cr) - Advanced Fluid Dynamics	
MCE 594 (3cr) - Special Topics in Mechanical Engineering	
MCE 650 (3cr) - Advanced Dynamics	
MCE 651 (3cr) - Advanced Engineering Materials	
MCE 652 (3cr) - Advanced Topics in Manufacturing	
MCE 653 (3cr) - HVAC Systems Design	
MCE 655(3cr) - Advanced Measurements and Design of Experiments	Pre-req. MCE 552
MCE 694 (3cr) - Special Topics in Mechanical Engineering	
MCE 696 (3cr) - Independent Study	
MTR 530 (3cr) - Modeling and Simulation of Dynamic Systems	
Other (please specify): _____	
Master's Thesis/Professional Project (9/3 credits)	
MCE 698 (3 cr) Professional Project	Good academic standing and approval of department head. Pre-requisite/concurrent MCE 695
MCE 699 (9 cr) Master's Thesis	Good academic standing and approval of department head. Pre-requisite/concurrent MCE 695

Students in both options may elect to take **one course** outside the list of elective courses , with the approval of their advisor and the program director.

B. Transferred Courses(if any): _____

C. Bridging Courses(if any): _____

D. Main Research Area: _____

Advisor: Dr. Mamoun Abdel-Hafez

Date & Signature: _____